

tion, 1.74, is 1.93 below the September average for a period of twenty-one years; in only three years of the record has the September precipitation been smaller.

Variety Mills, Nelson county: monthly precipitation, 0.04, is 3.38 below the September average for the last six years. In no month during the last ten years has the rainfall been as small as that for September, 1884.

West Virginia.—Helvetia, Randolph county: monthly precipitation, 0.92, is 3.40 below the September average for the last eight years. The smallest September precipitation previously recorded is 1.37 for 1881.

HAIL.

Hail is reported to have fallen in the various states and territories as follows:

Arkansas.—Lead Hill, 19th.
California.—Sacramento, 30th; Cape Mendocino, 29th.
Colorado.—Pike's Peak, 23d.
Dakota.—Webster, 26th.
Illinois.—Swanwick, 22d; Bunker Hill, 16th.
Indiana.—Vevay, 27th; Greencastle, 23d.
Iowa.—Independence, 22d; Cresco, 23d; Manchester, 10th; Dubuque, 23d; Keokuk, 22d; Des Moines, 9th.
Kansas.—Westmoreland, 27th; Independence, 19th; Manhattan, 6th; Allison, 4th.
Kentucky.—Frankfort, 9th.
Nebraska.—Genoa, 18th; Omaha, 26th.
Nevada.—Fort McDermit, 9th.
New Hampshire.—Mount Washington, 20th.
New York.—Le Roy, 2d; Menand Station (near Albany), 20th.

North Carolina.—Flat Rock, 22d.
Pennsylvania.—Erie: a severe hail-storm occurred between 5.30 and 6.30 p. m. on the 20th. The hail-stones were generally small, the largest being the size of hickory nuts. The storm passed off over the lake. No hail fell at points ten miles south and five miles east of Erie; hail fell at Catawissa on the 28th.

Texas.—Fort Concho, 10th.
Utah.—Salt Lake City, 14th.
Virginia.—Wytheville, 9th.
Washington Territory.—Pysht, 14th.
Wisconsin.—Sussex, 10th; Madison, 10th; Milwaukee, 10th; La Crosse, 21st.
Wyoming.—Fort Bridger, 8th.

SNOW.

Snow fell during September, as follows:

California.—Red Bluff: the mountains north and east of this place were covered with snow on the morning of the 9th.

Colorado.—On the summit of Pike's Peak, snow fell on the 1st, 22d, 23d, 26th, and 27th.

Georgetown, 26th: the first snow of the season fell here on this date.

Denver: a fierce snow storm occurred on Long's Peak during the evening of the 23d. A heavy snow storm prevailed in the mountains of western Colorado on the 26th.

Dakota.—Deadwood: light rain, with occasional sleet and light snow, fell from 10 a. m. to 8 p. m. on the 29th.

Montana.—Fort Maginnis: light snow began falling during the night of the 5-6th, and ended at 7 a. m. of the 6th; on the 7th light snow fell from 11 a. m. to 1 p. m., and again during the night of the 8th.

Fort Assinaboine: snow was observed on the mountains, about thirty miles north of this station, on the 7th; the Sweet Grass mountains, eighty-five miles north, were also covered.

Fort Ellis, 3d to 7th, 28th.

New Hampshire.—On the summit of Mount Washington: light snow fell from 5.58 to 6.50 p. m. on the 20th.

Novu Scotia.—Halifax, 15th: it is reported that five inches of snow fell at Spring Hill, Cumberland county, on the 14th; at Truro, snow fell to a depth of two inches.

Oregon.—East Portland: large flakes of snow fell between 2.45 and 3 a. m. on the 29th. At Lake View snow fell on the 6th and 30th.

Utah.—Salt Lake City: snow fell on the mountains surrounding this place on the 7th. Reports from Bute state that snow fell to a depth of six inches at that place on the 6th.

Wyoming.—Fort Bridger, 8th, 9th and 26th.

MONTHLY SNOW-FALLS.

[Expressed in inches and tenths.]

The following monthly snow-falls have been reported.

California.—Cisco, 14.0; Summit, 11.0.

Colorado.—On the summit of Pike's Peak, 4.3; traces remaining on the ground at the end of the month.

Nevada.—Otego, 6.0; Toano, 4.0; Wells, 2.5.

SLEET.

Pike's Peak, Colorado, 3d, 4th.

Deadwood, Dakota, 29th.

Fort Ellis, Montana, 25th.

Mount Washington, New Hampshire, 20th.

Table of rainy and cloudy days, relative humidity, and dew-point for Sept., 1884

Districts.	Rainy days.	Cloudy days.	Rel. humidity, %	Dew-point.
	From 5 to 12	From 2 to 6	Percentages.	From 49.3 to 59.9
New England.....	2 " 9	0 " 4	62.8 " 80.1	56.8 " 65.0
Middle Atlantic states.....	3 " 17	0 " 4	61.1 " 83.2	59.3 " 71.4
South Atlantic states.....	5 " 21	0 " 3	74.7 " 77.2	71.1 " 74.2
Florida peninsula.....	2 " 11	0 " 4	65.1 " 77.1	64.7 " 71.3
East Gulf states.....	6 " 15	2 " 6	69.3 " 81.9	67.5 " 74.6
West Gulf states.....	7 " 13	2 " 4	71.6 " 82.9	70.6 " 73.8
Rio Grande valley.....	7 " 11	3 " 9	62.3 " 73.7	56.6 " 63.9
Tennessee.....	3 " 9	3 " 8	71.0 " 80.7	60.6 " 66.4
Ohio valley.....	7 " 12	1 " 7	67.6 " 83.4	53.6 " 62.4
Lower lake region.....	9 " 23	4 " 9	68.6 " 78.3	49.4 " 57.4
Upper lake region.....	5 " 12	2 " 12	67.7 " 78.2	40.3 " 47.8
Extreme northwest.....	8 " 15	4 " 9	68.8 " 79.7	55.4 " 65.7
Upper Mississippi valley.....	4 " 8	3 " 6	58.0 " 74.8	44.2 " 48.8
Missouri valley.....	2 " 14	0 " 13	42.6 " 79.8	29.7 " 50.5
Northern slope.....	2 " 10	0 " 3	41.2 " 62.5	37.7 " 56.4
Middle slope.....	7 " 16	5 " 9	55.6 " 68.5	55.6 " 63.8
Southern slope.....	4 " 9	1 " 4	45.3 " 64.6	34.7 " 52.4
Southern plateau.....	6 " 15	1 " 7	60.6 " 64.3	38.1 " 42.8
Northern plateau.....	11 " 21	9 " 13	78.7 " 88.5	48.4 " 51.8
North Pacific coast region.....	2 " 5	0 " 5	45.4 " 81.0	43.0 " 52.1
Middle Pacific coast region.....	0 " 1	2 " 3	72.5 " 74.7	55.1 " 56.1
South Pacific coast region.....	Seventeen	None	94.9	40.0
Mt. Washington, N. H.....	Four	One	70.0	33.7
Pike's Peak, Colo.....	Six	Four	44.6	34.7
Salt Lake City, Utah.....				

• Relative humidity corrected for altitude.

COTTON REGION REPORTS.

In the table below are given the average precipitation and the means of the maximum and minimum temperatures for September, 1884, with the September averages for the two preceding years, in the several cotton growing districts. The reports from the district of Galveston are missing. In the districts of New Orleans, Charleston, Memphis, Vicksburg, and Little Rock, the precipitation was excessive and in the remaining districts it was deficient. The temperature was generally higher than the mean for the two preceding years in all of the districts.

Temperature and rainfall data for the cotton districts, September.

Districts.	Rainfall.			Temperature.									
	Average for Sept. of two preceding years.	Average for Sept., 1884.	Departures.	Maximum.				Minimum.				Extremes for Sept., 1884.	
				Mean for Sept. of two preced- ing years.	Mean for Sept., 1884.	Departures.	Mean for Sept. of two preced- ing years.	Mean for Sept., 1884.	Departures.	Max.	Min.		
New Orleans...	1.93	2.67	+ 0.74	87.6	90.6	+ 3.0	64.0	69.3	+ 5.3	99	53		
Savannah.....	3.52	2.34	- 1.18	86.8	88.4	+ 1.6	66.4	65.7	- 0.7	98	42		
Charleston.....	4.06	6.54	+ 2.48	84.6	85.0	+ 0.4	65.0	66.0	+ 1.0	98	54		
Atlanta.....	2.44	0.52	- 1.92	82.8	87.6	+ 4.8	61.7	63.7	+ 2.0	98	44		
Wilmington.....	6.42	3.32	- 3.10	80.7	85.8	+ 5.1	62.0	62.1	+ 0.1	99	43		
Memphis.....	1.37	2.06	+ 0.69	84.0	88.1	+ 4.1	58.3	64.3	+ 6.0	100	45		
Galveston.....	3.04			87.8			65.0						
Vicksburg.....	1.42	2.56	+ 1.14	87.0	91.0	+ 4.0	61.4	67.4	+ 6.0	98	55		
Montgomery.....	1.95	0.22	- 1.73	85.4	90.0	+ 4.6	61.4	66.0	+ 4.6	108	45		
Augusta.....	2.88	2.33	- 0.55	84.4	87.6	+ 3.2	64.0	64.0	normal	102	44		
Little Rock.....	1.48	2.90	+ 1.42	85.5	88.5	+ 3.0	63.0	63.0	+ 6.8	99	29		
Mobile.....	1.62	0.45	- 0.57	88.8	90.4	+ 1.6	62.8	66.0	+ 3.2	98	51		